

CLAIMS

1. A device for attaching a free weight to a leg comprising:

a lower leg assembly including a calf support member and a heel support member;

a foot assembly including a foot support member and a clamp for releasably engaging a free weight;

a transverse member connecting the lower leg assembly and foot assembly; and

first and second straps connected to the calf support member and foot support member, respectively, the straps being releasably attachable to a leg.
2. The device of claim 1 wherein the lower leg assembly further includes a beam connecting the calf support and heel support members.
3. The device of claim 1 wherein the calf support member is a curved plate defining a concave surface to accept a calf of a leg, and the heel support member is a curved plate defining a concave surface to accept a heel, both of the concave surfaces having padding attached thereto.
4. The device of claim 1 wherein the clamp comprises a lower sleeve half fixed to the foot support member and an upper sleeve half pivotally connected to the lower sleeve half.
5. The device of claim 4 wherein the clamp further comprises a stud and a pair of lugs attached to the upper sleeve half, inner and outer clevises attached to the lower sleeve half, and a T-shaped nut, the upper sleeve half pivotally connected to the lower sleeve half at the stud and inner clevis.

6. The device of claim 5 wherein the lower sleeve half has a slot defined by the outer clevis, the slot including a toggle bolt pivotally attached therein, the upper sleeve half having an upper slot between the pair of lugs to receive a portion of the toggle bolt, the T-shaped nut threadingly engagable with the toggle bolt to contact the lugs and urge the upper and lower sleeve halves closed.

7. The device of claim 1 wherein the clamp comprises a weight bar fixedly attached to the foot support member and extending horizontally beyond left and right sides of the foot support member, and a pair of locking collars, the weight bar adapted to accept standard free weight plates, the locking collars releasably securing the free weight plates to both ends of the weight bar.

8. The device of claim 1 wherein the clamp comprises a locking collar and a weight bar fixedly attached to the foot support member, the weight bar extending upwardly from the foot support member and adapted to accept at least one free weight plate, the locking collar releasably securing the at least one free weight plate to the weight bar.

9. The device of claim 1 wherein the transverse member is adapted to extend and retract to accommodate various foot lengths.

10. The device of claim 9 wherein the transverse member comprises a rear section and a front section, the rear section extending from the heel support member toward the foot support member, the front section extending from the foot support member towards the rear section, one of the front and rear sections having a plurality of aligned pairs of apertures, the other of said front and rear sections having at least one aligned pair of apertures, the front and rear aligned pairs of apertures overlap and receive bolts for connecting the foot

assembly to the lower leg assembly and so that the foot assembly can be spaced apart from the heel support by at least two different foot lengths.

11. The device of claim 9 wherein the foot assembly further includes a bracket extending upwardly from the foot support member at an end thereof, the foot support member has padding attached to a foot contacting surface.

12. The device of claim 11 wherein the transverse member comprises a rear section and a front section, the rear section extending from the heel support member toward the bracket, the front section extending from the bracket towards the rear section, one of the front and rear sections has a plurality of aligned pairs of apertures, the other of the front and rear section has at least one aligned pair of apertures, the at least one aligned pair of apertures overlaps at least one aligned pair of the plurality of aligned pairs which receive bolts to permit the foot assembly to be connected to the lower leg assembly and so that the foot assembly can be spaced apart from the heel support by at least two different foot lengths.

13. The device of claim 11 wherein the rear section has padding attached to an inner surface thereof.

14. The device of claim 2 wherein the beam has a rear opening adjacent an end connected to the heel support, the rear opening permitting the device to be used with exercise machines by attaching a cable to the opening, the cable used by the exercise machines along with at least one pulley to lift weights.

15. The device of claim 1 wherein the foot assembly has a front opening, the front opening permitting the device to be used with exercise machines by attaching a cable to the

opening, the cable used by the exercise machines along with at least one pulley to lift weights.

16. The device of claim 1 wherein the first strap is removably connected to the calf support member and has a D-ring and complementary hook and loop fastener surfaces for securing the leg assembly to a leg.

17. The device of claim 1 wherein the second strap is removably connected to the foot support member and has a D-ring and complementary hook and loop fastener surfaces for securing the foot assembly to a foot,

18. The device of claim 16 wherein the first strap further includes padding on a shin contacting surface

19. The device of claim 17 wherein the second strap further includes a non-slip surface.

20. A device to permit a leg to exercise with a free weight comprising:

a lower leg brace including a calf support member, a heel support member, a beam joining the calf support and heel support members, and a leg fastener;

a foot assembly including a weight bed, a clamp and a foot fastener; and

a transverse member connecting the lower leg brace and foot assembly.

21. The device of claim 20 wherein the calf support member is curved defining a concave surface to accept a calf of a leg and the heel support member is curved defining a concave surface to accept a heel, both of the concave surfaces having padding attached thereto.

22. The device of claim 20 wherein the leg fastener comprises a calf strap removably connected to the calf support member and having a D-ring and complementary hook and loop fastener surfaces for securing the lower leg brace to a leg.

23. The device of claim 20 wherein the foot fastener comprises a foot strap removably connected to the foot support member and having a D-ring and complementary hook and loop fastener surfaces for securing the foot assembly to a foot.

24. The device of claim 22 wherein the calf strap further includes padding on a shin contacting surface.

25. The device of claim 23 wherein the foot strap further includes a non-slip surface.

26. The device of claim 20 wherein the clamp comprises a lower sleeve half fixed to the weight bed and an upper sleeve half pivotally connected to the lower sleeve half.

27. The device of claim 26 wherein the clamp further comprises a stud and a pair of lugs attached to the upper sleeve half, inner and outer clevises attached to the lower sleeve half, and a T-shaped nut, the upper sleeve half pivotally connected to the lower sleeve half at the stud and inner clevis.

28. The device of claim 27 wherein the lower sleeve half has a slot defined by the outer clevis, the slot including a toggle bolt pivotally attached therein, the upper sleeve half having an upper slot between the pair of lugs to receive a portion of the toggle bolt, the T-shaped nut threadably engagable with the toggle bolt to contact the lugs and urge the upper and lower sleeve halves closed.

29. The device of claim 20 wherein the clamp comprises a weight bar fixedly attached to the weight bed and extending

horizontally beyond left and right sides of the weight bed, and a pair of locking collars, the weight bar adapted to accept standard free weight plates, the locking collars releasably securing the free weight plates to both ends of the weight bar.

30. The device of claim 20 wherein the clamp comprises a locking collar and weight bar fixedly attached to the weight bed, the weight bar extending upwardly from the weight bed and adapted to accept at least one free weight plate, the locking collar releasably securing the at least one free weight plate to the weight bar.

31. The device of claim 20 wherein the transverse member is adapted to extend and retract so that a distance between the lower leg brace and the foot assembly can be adjusted to accommodate various foot lengths.

32. The device of claim 31 wherein the foot assembly further comprises a bracket extending upwardly from the weight bed.

33. The device of claim 32 wherein the transverse member comprises front and rear overlapping sections, the front section extending from the bracket towards the heel support member, the rear section extending from the heel support member towards the bracket, the front and rear sections having spaced apart holes which receive bolts so that the distance between the lower leg brace and foot assembly can be adjusted to accommodate various foot lengths.

34. The device of claim 31 wherein the transverse member comprises front and rear overlapping sections, the front section extending from the weight bed towards the heel support member, the rear section extending from the heel support member towards the weight bed, the front and rear sections having spaced apart holes which receive bolts so that the

distance between the lower leg brace and foot assembly can be adjusted to accommodate various foot lengths.

35. The device of claim 20 wherein the beam has a rear opening adjacent an end connected to the heel support the rear opening permitting the device to be used with exercise machines by attaching a cable to the rear opening, the cable used by the exercise machines along with at least one pulley to lift weights.

36. The device of claim 20 wherein the foot assembly has a front opening adjacent an upper end of the bracket, the front opening permitting the device to be used with exercise machines by attaching a cable to the front opening, the cable used by the exercise machines along with at least one pulley to lift weights.

37. A device allowing a leg to exercise with free weights comprising:

a lower leg assembly including a calf support, a heel support and a girder joining the calf and heel supports;

a foot support member having a clamp for securely holding a barbell or dumbbell; and

an adjustable transverse member connecting the leg assembly and foot support member so that a distance between the leg assembly and the foot support member can be altered to accommodate various foot sizes.